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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,406	10/26/1999	JAMES M. BROWN	QCPA9900029	5890

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

WILSON, ROBERT W

ART UNIT PAPER NUMBER

2661

DATE MAILED: 03/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/429,406

Applicant(s)

BROWN ET AL.

Examiner

Robert W Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-~~5~~ is/are pending in the application.
- 4a) Of the above claim(s) 6-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8. 6) ☐ Other:

DETAILED ACTION

1.0 The application of James M. Brown et al. for a "METHOD AND APPARATUS FOR EFFICIENT DATA TRANSMISSION CONTROL IN A WIRELESS VOICE-OVER-DATA COMMUNICATION SYSTEM" which was filed on October 26, 1999 without foreign priority. The case was examined and Claims 1-5 are pending.

Drawings

2.0 The drawings in this application were approved by the draftsman.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3.0 Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by HIPPELAINEN (International Publication Number: WO 99/33230 dated 1 July 1999 which is also an IDS document of record)

Referring to Claim 1, HIPPELAINEN teaches: A method for transmitting time-sensitive information over a wireless voice-over-data communication system, used in conjunction with a predefined data protocol (General Packet Radio Service per Pg 2 lines 27-28 or predefined data protocol is utilized for transmitting voice in frames or voice over data which is time sensitive data in a communication system), comprising the steps of:

defining a minimum segment size for information to be transmitted (The minimum size segment is zero bits within a frame per Pg 3 lines 16-17)

defining a maximum segment size for information to be transmitted (The frame is the maximum segment size per Pg 3 lines 16-17), said second segment size greater than said first segment size

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(The sum of the first and second block or second segment is greater than the first block or first segment per Pg 3 lines 16-17);

generating a first segment from said time-sensitive information if a sufficient quantity of said time-sensitive information is available for transmission (The first block or first segment per Pg 3 lines 16-17 of time sensitive information is available for transmission), said first segment having a segment size between said minimum segment size and said maximum segment size (The first block is a segment size between zero or minimum and the maximum or the frame size per Pg 3 lines 16-17);

and generating a second segment having a segment size less than or equal to said maximum segment size upon the occurrence of a predefined event (The sum of the first and second block per Pg 3 lines 16-17 or second segment per Pg 3 lines 16-17)

In Addition:

wherein said predefined event comprises the receipt of an acknowledgment message (The referenced teaches HDLC per Pg 3 line 5. Acknowledgement is inherent part of HDLC upon receipt of a frame or predefined event).

wherein said maximum segment size is negotiated between a transmitter and a receiver (The maximum segment size is negotiated between the parties or transmitter and receiver per Pg 3 line 12).

Claim Rejections - 35 USC § 103

4.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over HIPPELAINEN

(International Publication Number: WO 99/33230 dated 1 July 1999 which is also an IDS document of record)

Referring to Claim 4, HIPPELAINEN teaches: An apparatus for transmitting time-sensitive information over a wireless voice-over-data communication system, used in conjunction with a predefined data protocol (An apparatus for transmitting voice or time sensitive data by implementing General Packet Radio Service per Pg 2 lines 27-28 or predefined data protocol which is utilized for transmitting voice in frames or voice over data which is time sensitive data in a communication system), comprising:

means for negotiating a maximum segment size with a receiver (Negotiate length of frames or maximum segment size between parties or receiver and transmitter per Pg 3 lines 11-13) ;

a memory for storing a minimum segment size (The examiner interprets minimum segment to be the first block or minimum segment per Pg 3 lines 16-17. It is within the level of one skilled in the art to implement the algorithms for a General Packet Radio per Pg 2 line 25-Pg 3 line 34. It would be obvious to one of ordinary skill in the art at the time of the invention to utilize a first processor, memory, and a queue when implementing these algorithms in hardware and software; therefore, it would be obvious for the minimum segment size to be stored in memory) ;

a queue for storing data frames (frame per Pg 3 line 17. It is within the level of one skilled in the art to implement the algorithms for a General Packet Radio per Pg 2 line 25-Pg 3 line 34. It would be obvious to one of ordinary skill in the art at the time of the invention to utilize a first processor, memory, and a queue when implementing these algorithms in hardware and software; therefore, it would be obvious for the frame or data frame to be stored in a queue),

said data frames representing time sensitive information (The frames represent voice or time sensitive data in a GPRS system per Pg 2 line 25-Pg 3 line 34);

and a first processor for generating at least one segment from said data frames stored within said queue when a segment size greater than or equal to said minimum segment size can be generated from said data frames: (Generating a first block or or at least one segment from the data frames when the length is greater than the minimum frame length and can be generated from the first block or data frames Per Pg 2 line 25-Pg 3 line 34. It is within the level of one skilled in the art to implement the algorithms for a General Packet Radio Pg 2 line 25-Pg 3 line 34. It would be obvious to one of ordinary skill in the art at the time of the invention to utilize a first processor , memory, and a queue when implementing these algorithms in hardware and software;

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therefore, it would be obvious to create a first processor for generating at least one segment from said data frames stored within said queue when a segment size is greater than or equal to the minimum segment size that can be generated from the data frames.

HIPPELAINEN does not particularly teach: queue, memory, or first processor but teaches the algorithms for a General Packet Radio per Pg 2 line 25-Pg 3 line 34.

It would be obvious to one of ordinary skill in the art at the time of the invention to utilize a first processor, memory, and a queue when implementing these algorithms in hardware and software

Claim Rejections - 35 USC § 103

5.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over HIPPELAINEN (International Publication Number: WO 99/33230 dated 1 July 1999 which is also an IDS document of record) further in view of Kim (U.S. Patent No.: 6,421,353B1)

Referring to Claim 5, HIPPELAINEN teaches: The apparatus of claim 4,

HIPPELAINEN does not particularly call for: further comprising a vocoder for generating data frames from said time-sensitive information.

Kim teaches: further comprising a vocoder for generating data frames from said time-sensitive information per col 1 lines 25-40)

It would be obvious to one of ordinary skill in the art to add the vocoder of Kim to the mobile radio or GPRS system of HIPPELAINEN in order to transmit voice data using a vocoder with a variable rate per col 1 lines 25-40.

5.0

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

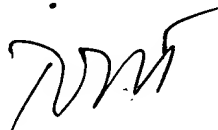
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Robert W Wilson
Examiner
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RWW
March 4, 2003



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